

Claims 3-5 and 11 were rejected under 35 USC 103(a) as being unpatentable over Bischof in view of U.S. Patent No. 5,298,165 to Oka et al..

By this Amendment, Claim 1 has been amended. Claim 1, as amended, is directed to a disposable fluid processing set for treating a biological fluid. The processing set includes a first portion comprising a container for containing the biological fluid during treatment and a second portion comprising a container for receiving the biological fluid after treatment. The tubing connects the containers and defines an openable flow path therebetween. The processing set also includes a holder for receiving and temporarily holding the container of the second portion during a processing step.

Bischof is directed to a system for treating a biological fluid such as blood. In Bischof, the system includes a treatment device that actually receives fluid from the source container and conveys the fluid after treatment to a collection container. While it is true that the device 12 separates containers 14 and 16 from one another during processing, it does not receive nor hold a container. There is no disclosure or suggestion in Bischof that the device receives and temporarily holds one of the containers, as set forth in Claim 1, as amended. Indeed, in Bischof, it is only the fluid from the containers that enters the device 12. For this reason,

Claim 1 (and its dependent claims) is patentable over Bischof, taken alone or in combination with Oka et al.

In addition to the claim amendment described above, Applicants have made minor amendments to the specification and the drawings. Applicants respectfully submit that the changes to the specification and the drawings are being made for the purposes of clarity and consistency with and within the specification.

For example, on page 9, line 12, Applicants note that the control module also includes a power supply 167 (which is diagrammatically shown in Fig. 14 and referred to elsewhere in the specification). A corresponding change, indicating power supply 167, has also been made to Fig. 4. Also, in the same paragraph, the reference numeral (26) for the control module has been inserted at line 12 and the references to filter pass throughs 34a and 34b have been reversed.

On page 17, line 32, the reference numeral for input/output board has been changed from 170 to 33, consistent with the remainder of the specification (see, for example, page 9, line 12). On page 18 (of the same paragraph), line 1, the word "a" has been deleted.

On page 21, line 1, the correct figure being referenced is, in fact, Fig. 14A and not Fig. 14.

Also, on page 21, line 22, the correct reference numeral for radiometer is 460, and not 469, consistent with the remainder of the specification and Fig. 14A.

On page 23, lines 21-22, this sentence has been amended to improve the grammar and sentence structure. Likewise, in that same paragraph, at line 25, the reference numeral for light drawer fans has been changed from 101 to 109, consistent with the remainder of the specification (see page 14, line 8) and the drawings (Figs. 5-6).

Finally, on page 33, line 30, correction of a typographical error, namely, changing the word "for" to "forth" has been made.

Applicants have also made minor corrections to the drawings. For example, in Fig. 4, the correct location of the input/output board shown in Fig. 4 has now been identified with reference numeral 33. The previously identified element 33 is, in fact, power supply 167 and this reference numeral has been added. In Fig. 5, the reference numeral 74 for the marker assembly described on page 10, line 23, has been added.

In Fig. 7, the lead line from reference numeral 184 has been extended to point to the dividing wall, described at page 16, lines

21-23. Also, reference numeral 188 has been added to Fig. 7 to identify the first compartment described at page 17, lines 4-6.

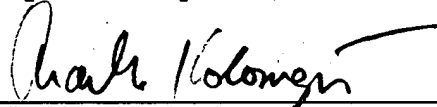
In Fig. 9, a reference numeral 97a has been added to show the cam described at page 12, line 16.

In Fig. 14, the reference numeral 170 has been changed to 33, consistent with the description in the specification at page 17, line 32, as amended.

Finally, in Fig. 14A, reference numerals 465, 467 and 468, referred to on page 21, lines 1-20, have been added.

Reconsideration of the pending Claims 1-11, favorable consideration of new Claims 12-26 and allowance of all of the claims are respectfully requested.

Respectfully submitted,



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VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE SPECIFICATION:

[On page 9, first paragraph beginning at line 1]

The interior components of control module 26 are generally shown in Fig. 4. Control module 26 will typically include a programmable microprocessor for operation of light box 10 including central processing unit 27 and memory devices such as random access memory (RAM) and EPROMS for the system program storage and non-volatile memory for back-up data storage. Control module 26 may further include an isolation transformer 29 for converting an AC input voltage to a DC control system voltage and for maintaining leakage current within acceptable limits for medical devices. Other components within control module 26 may include power supply 167, input/output board 33 and a power inlet module 34, filtered pass through ~~34a~~ 34b for use with an external light intensity sensing device and ~~input/~~ filtered output pass through ~~34b~~ 34a.

[On Page 17, second full paragraph beginning at line 26 and bridging pages 17-18]

Light box 10 may include sensors for detecting different conditions during the pretreatment and treatment process. The sensors relay signals to the microprocessor of the light box 10

which is housed within control module 26. As shown for example in Fig. 14, sensors (e.g., 404, 430) send signals through the sensor input/output board ~~170~~ 33 which translates the signal into a format that is understandable by microprocessor 160. The computer alerts the operator, either by an audible alarm or a message on the display screen 37. The operator may, in response to the alarm or message, take action through keypad 39. Alternatively, in response to certain alarm conditions, the control system may be preprogrammed to automatically take action, such as ~~a~~ terminate treatment, if necessary.

[On page 21, the first paragraph beginning at line 1]

As shown in Fig. ~~14~~ 14A, radiometer 460 may include a support 465 having a top surface 467 and a bottom surface 468. Support 465 is typically a printed circuit board. One or more sensors 469 are electrically and physically connected to support 465.

[On page 21, the third paragraph beginning at line 21]

An electrical cord (not shown) is attached to radiometer ~~469~~ 460 for electrical connection to light box 10 and, for example, port 461 (Fig. 5). This allows radiometer 460 to transmit data to the computer-based control system of light box 10, which system provides information to the operator and/or automatically takes action based

on the transmitted data. Radiometer 460 may also include a slit 472 for placement over tab 186 in tray 90 of light box 10.

[On page 23, the second full paragraph beginning at line 15]

The components of the fluid treatment module 28 including the agitator assembly, the light sources, the blower, the marker subassembly are powered by power supplies as shown in Fig. 14. (In Fig. 14, the letter "n" represents the number of electrical or mechanical components such as sensors, lamps, ballasts etc.). For example, as power supplies (ballasts) 166 ~~for powering~~ power lamps 100 ~~through~~ and are controlled and supplied by relay board and isolation transformer 29. Shaker motor 92 is powered through relay board and isolation transformer 29. Additional power supply 168 supplies power for the blower 134, light drawer fans ~~101~~ 109, and drive motors 120 for markers 76a-d and door lock 480. Preferably, the power supply for powering these components may be approximately 24 volts DC. Power supply 167 may supply +5, +12, -12 volts DC to, for example, computer board 160.

[On page 33, the second full paragraph beginning at line 28]

Once the containers are in their respective compartments of tray 90, fluid carrying drawer 50 is closed. As set ~~for~~ forth above, plunger switch 36a (Fig. 4) is pressed when door 36 is

closed. If door 36 is open, plunger switch 36a serves as an electrical cut off. If, the door is open, the system will not permit the treatment to proceed.

IN THE CLAIMS:

1 (Amended). A disposable fluid processing set for treating a biological fluid comprising:

a first portion comprising a container for containing the biological fluid during treatment;

a second portion comprising a container for receiving the biological fluid after treatment;

a tubing connecting said containers and defining an openable flow path therebetween; and

a holder for receiving and temporarily holding said container of said second portion ~~separate from said first portion~~ during a processing step.